

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) Method of writing information in a storage layer ~~(2A, 2B)~~ of a multi-layer optical storage medium ~~(2)~~ comprising two or more storage layers ~~(2A, 2B)~~, the method comprising acts of:

~~monitoring a focus condition of an optical write beam (32b);~~
determining if each of two or more axial focus displacement indicators indicate that an axial focus displacement event has occurred, otherwise determining that the axial focus displacement event has not occurred; and

inhibiting the writing process in case of an axial focus displacement event occurrence.

2. (Currently amended) Medium access device ~~(10)~~, capable of writing information in a storage layer ~~(2A, 2B)~~ of a multi-layer optical storage medium ~~(2)~~ comprising two or more storage layers ~~(2A, 2B)~~;

the medium access device ~~(10)~~ comprising:

light beam generating means ~~(31)~~ for generating a write light beam ~~(32)~~;

~~focussing~~focusing means ~~(34)~~ for ~~focussing~~focusing the write light beam ~~(32)~~ in a focal spot ~~(F)~~ at a target storage layer ~~(2A)~~;

write inhibit means ~~(64)~~ for inhibiting a writing process in case of an axial focus displacement event only if each of two or more axial focus displacement indicators indicate that an axial focus displacement event has occurred.

3. (Currently amended) ~~Medium~~ The medium access device according to claim 2, further comprising a driver circuit ~~(63)~~ for driving the light beam generating means ~~(31)~~ in accordance with a data signal ~~(SDATA)~~ representing data to be written, the driver circuit ~~(63)~~ having a control input ~~(63a)~~, wherein the write inhibit means ~~(64)~~ have an output ~~(64a)~~ coupled to said control input ~~(63a)~~ of the driver circuit ~~(63)~~, the write inhibit means ~~(64)~~ being designed to generate a command signal ~~(SINHIBIT)~~ for the driver circuit ~~(63)~~ such as to effectively inhibit the driver circuit (63) in case of an axial focus displacement event.

4. (Currently amended) ~~Medium~~—The medium access device according to claim 2, wherein the write inhibit means ~~(64)~~ has at least ~~one~~ input (64b, 64c, 64d) two inputs for receiving at least ~~one~~ input signal two different input signals capable of indicating an axial focus displacement;

the write inhibit means ~~(64)~~ being designed to monitor at least ~~one~~ two of its input signals and to inhibit the writing process only if at least ~~one~~ two of the input signals is indicative of the occurrence of an axial focus displacement event.

5. (Currently amended) ~~Medium~~—The access device according to claim 2, wherein the write inhibit means ~~(64)~~ has at least ~~one~~ input (64b, 64c, 64d) three inputs for receiving at least ~~one~~ input signal three different input signals capable of indicating an axial focus displacement;

the write inhibit means ~~(64)~~ being designed to monitor at least two of its input signals and to inhibit the writing process only if at least two of the input signals are indicative in a correlated way of the occurrence of an axial focus displacement event.

6. (Currently amended) ~~Medium~~ The medium access device according to claim 2, wherein the write inhibit means ~~(64)~~ has at least ~~one~~ input ~~(64b, 64c, 64d)~~ two inputs for receiving at least ~~one~~ two input ~~signal~~ signals capable of indicating an axial focus displacement;

the write inhibit means ~~(64)~~ being designed to monitor an input signal, to calculate an axial focus displacement from the input signal, and to decide that the input signal is indicative of an axial focus displacement event if the calculated axial focus displacement exceeds a predetermined displacement threshold.

7. (Currently amended) ~~Medium~~ The medium access device according to claim 2, wherein the write inhibit means ~~(64)~~ has at least ~~one~~ input ~~(64b, 64c, 64d)~~ two inputs for receiving at least ~~one~~ two input ~~signal~~ signals capable of indicating an axial focus displacement;

the write inhibit means ~~(64)~~ being designed to monitor an input signal, to monitor for the possible occurrence of a predefined characteristic feature of the input signal, and to decide that the input signal is indicative of an axial focus displacement event if such characteristic feature occurs.

8. (Currently amended) ~~Medium~~ The medium access device according to claim 2, wherein the write inhibit means ~~(64)~~ has at least ~~one~~ input (64b, 64c, 64d) two inputs for receiving at least ~~one~~ two input ~~signal~~ signals capable of indicating an axial focus displacement;

the write inhibit means ~~(64)~~ being designed to monitor at least one of its input signals, to determine the speed with which said at least one of its input signals changes in time ~~(first or higher time-derivative)~~, and to decide that the input signal indicates that an axial focus displacement event is about to occur on the basis of an evaluation of such changes.

9. (Currently amended) ~~Medium~~ The medium access device according to claim 8, the write inhibit means ~~(64)~~ being designed to inhibit the writing process if ~~the~~ a time-derivative of said at least one of its input signals predicts an axial focus displacement event, ~~i.e. even before the axial focus displacement event actually occurs.~~

10. (Currently amended) ~~Medium~~ The medium access device according

to claim 4, further comprising at least one vibration/acceleration sensor—(81);

the write inhibit means (64)—being designed to monitor at least an output signal from the at least one vibration/acceleration of a vibration sensor and an acceleration sensor—(81).

11. (Currently amended) ~~Medium~~—The medium access device according to claim 4, further comprising at least one optical detector (35) for receiving light (32d)—reflected from the storage medium—(2);

the write inhibit means (64)—being designed to monitor at least one signal derived from at least one detector output signal.

12. (Currently amended) ~~Medium~~—The medium access device according to claim 11, the write inhibit means (64)—being designed to monitor at least one of a signal (SCA)—corresponding to the reflected central aperture signal obtained from a forward-sense diode of the sensor—(35), or to monitor at least a signal (SFE)—corresponding to the focal error signal—(FE), or to monitor at least a signal (SFEI)—corresponding to the focal error signal (FE)—integrated with a predetermined time constant.

13. (Currently amended) ~~Medium~~ The medium access device according to claim 2, capable of handling ~~multi-layer optical discs,~~ especially at least one of DVD-discs or and BD discs.

14. (New) Medium access device, capable of writing information in a storage layer of a multi-layer optical storage medium comprising two or more storage layers, the medium access device comprising:

light beam generating means for generating a write light beam;

focusing means for focusing the write light beam in a focal spot at a target storage layer;

write inhibit means for inhibiting a writing process in case of an axial focus displacement event, wherein the write inhibit means is designed to monitor at least one input signal capable of indicating an axial focus displacement, to determine a speed with which said at least one input signal changes in time, and to decide that the input signal indicates that an axial focus displacement event is about to occur on the basis of an evaluation of such changes.

15. (New) The medium access device according to claim 14, the write inhibit means being designed to inhibit the writing process if a time-derivative of said at least one input signal predicts an axial focus displacement event.

16. (New) The medium access device according to claim 15, wherein the time-derivative is a first order time derivative.

17. (New) The medium access device according to claim 15, wherein the time-derivative is higher than a first order time derivative.